

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1.-11. (Cancelled).

12. (New) A broadcast receiving method comprising:

a receiving step of receiving a broadcast in which additional information that is made to correspond to an object appearing in broadcast contents broadcasted from a broadcasting station and that contains keyword information specifying said object is broadcasted simultaneously with said broadcast contents;

a recognition vocabulary set generating step of utilizing a synonym dictionary in which a plurality of words are classified into word classes on the basis of the synonymy between the words, and of thereby generating, in a manner corresponding to said additional information, a recognition vocabulary set consisting of words belonging to said word class including a word corresponding to said received keyword information;

a speech recognition step of performing speech recognition of a voice uttered by a viewing person;

a specifying step of specifying said keyword information corresponding to said recognition vocabulary set when a word recognized as the speech recognition result is contained in the recognition vocabulary set; and

a displaying step of displaying additional information corresponding to said specified keyword information.

13. (New) A broadcast receiving method comprising:

a receiving step of receiving a broadcast in which additional information that is made to correspond to an object appearing in broadcast contents

broadcasted from a broadcasting station and that contains keyword information specifying said object and a language model are broadcasted simultaneously with said broadcast contents;

a correcting step of utilizing a synonym dictionary in which a plurality of words are classified into word classes on the basis of the synonymy between the words, and of thereby correcting a frequency of appearance of a predetermined combination of said word classes in an expression form of said language model and/or a frequency of appearance of a predetermined word with reference to said word class in an expression form of said language model, on the basis of history information of speech recognition result of already performed speech recognition;

a speech recognition step of performing speech recognition of a voice uttered by a viewing person, by using said corrected language model;

a specifying step of specifying said keyword information on the basis of the speech recognition result; and

a displaying step of displaying additional information corresponding to said specified keyword information.

14. (New) A broadcast receiving method comprising:

a receiving step of receiving a broadcast in which additional information that is made to correspond to an object appearing in broadcast contents broadcasted from a broadcasting station and that contains keyword information specifying said object and information specifying a language model are broadcasted simultaneously with said broadcast contents;

a language model specifying step of specifying said language model retained in advance, by using information specifying said received language model;

a correcting step of utilizing a synonym dictionary in which a plurality of words are classified into word classes on the basis of the synonymy between the words, and of thereby correcting a frequency of appearance of a predetermined combination of said word classes in an expression form of said specified language

model and/or a frequency of appearance of a predetermined word with reference to said word class in an expression form of said specified language model, on the basis of history information of speech recognition result of already performed speech recognition;

a speech recognition step of performing speech recognition of a voice uttered by a viewing person, by using said corrected language model;

a specifying step of specifying said keyword information on the basis of the speech recognition result; and

a displaying step of displaying additional information corresponding to said specified keyword information.

15. (New) A broadcast receiving system comprising:

a first apparatus having a broadcasting part for broadcasting additional information that is made to correspond to an object appearing in broadcast contents broadcasted from a broadcasting station and that contains keyword information specifying said object, simultaneously with said broadcast contents, and

a second apparatus having: receiving part for receiving said broadcast broadcasted from said first apparatus; recognition vocabulary set generating part for utilizing a synonym dictionary in which a plurality of words are classified into word classes on the basis of the synonymy between the words, and of thereby generating, in a manner corresponding to said additional information, a recognition vocabulary set consisting of words belonging to said word class including a word corresponding to said broadcasted keyword information; speech recognition part for performing speech recognition of a voice uttered by a viewing person; specifying part for specifying said keyword information corresponding to said recognition vocabulary set when a word recognized as the speech recognition result is contained in the recognition vocabulary set; and displaying part for displaying additional information corresponding to said specified keyword information.

16. (New) A broadcast receiving system comprising:

a first apparatus having broadcasting part for broadcasting additional information that is made to correspond to an object appearing in broadcast contents broadcasted from a broadcasting station and that contains keyword information specifying said object, and a language model, simultaneously with said broadcast contents, and

a second apparatus having: receiving part for receiving said broadcast broadcasted from said first apparatus; correcting part for utilizing a synonym dictionary in which a plurality of words are classified into word classes on the basis of the synonymy between the words, and of thereby correcting a frequency of appearance of a predetermined combination of said word classes in an expression form of said language model and/or a frequency of appearance of a predetermined word with reference to said word class in an expression form of said language model, on the basis of history information of speech recognition result of already performed speech recognition; speech recognition part for performing speech recognition of a voice uttered by a viewing person, by using said corrected language model; specifying part for specifying said keyword information on the basis of the speech recognition result; and displaying part for displaying additional information corresponding to said specified keyword information.

17. (New) A broadcast receiving system comprising:

a first apparatus having broadcasting part for broadcasting additional information that is made to correspond to an object appearing in broadcast contents broadcasted from a broadcasting station and that contains keyword information specifying said object, and information specifying a language model, simultaneously with said broadcast contents, and

a second apparatus having: receiving part for receiving said broadcast broadcasted from said first apparatus; language model specifying part for specifying said language model retained in advance, by using information specifying said received language model; correcting part for utilizing a synonym dictionary in which a plurality of words are classified into word classes on the basis of the synonymy between the words, and of thereby correcting a frequency of appearance of a predetermined combination of said word classes in an expression form of said

specified language model and/or a frequency of appearance of a predetermined word with reference to said word class in an expression form of said specified language model, on the basis of history information of speech recognition result of already performed speech recognition; speech recognition part for performing speech recognition of a voice uttered by a viewing person, by using said corrected language model; specifying part for specifying said keyword information on the basis of the speech recognition result; and displaying part for displaying additional information corresponding to said specified keyword information.

18. (New) A first apparatus comprising:

broadcasting part for broadcasting additional information that is made to correspond to an object appearing in broadcast contents broadcasted from a broadcasting station and that contains keyword information specifying said object, simultaneously with said broadcast contents;

wherein said broadcast is received by a second apparatus comprising: receiving part for receiving said broadcast; recognition vocabulary set generating part for utilizing a synonym dictionary in which a plurality of words are classified into word classes on the basis of the synonymy between the words, and of thereby generating, in a manner corresponding to said additional information, a recognition vocabulary set consisting of words belonging to said word class including a word corresponding to said broadcasted keyword information; speech recognition part for performing speech recognition of a voice uttered by a viewing person; specifying part for specifying said keyword information corresponding to said recognition vocabulary set when a word recognized as the speech recognition result is contained in the recognition vocabulary set; and displaying part for displaying additional information corresponding to said specified keyword information.

19. (New) A first apparatus comprising:

broadcasting part for broadcasting additional information that is made to correspond to an object appearing in broadcast contents broadcasted from a broadcasting station and that contains keyword information specifying said object, and a language model, simultaneously with said broadcast contents;

wherein, said broadcast is received by a second apparatus comprising: receiving part for receiving said broadcast; correcting part for utilizing a synonym dictionary in which a plurality of words are classified into word classes on the basis of the synonymy between the words, and of thereby correcting a frequency of appearance of a predetermined combination of said word classes in an expression form of said language model and/or a frequency of appearance of a predetermined word with reference to said word class in an expression form of said language model, on the basis of history information of speech recognition result of already performed speech recognition; speech recognition part for performing speech recognition of a voice uttered by a viewing person, by using said corrected language model; specifying part for specifying said keyword information on the basis of the speech recognition result; and displaying part for displaying additional information corresponding to said specified keyword information.

20. (New) A first apparatus comprising:

broadcasting part for broadcasting additional information that is made to correspond to an object appearing in broadcast contents broadcasted from a broadcasting station and that contains keyword information specifying said object, and information specifying a language model, simultaneously with said broadcast contents;

wherein said broadcast is received by a second apparatus comprising: receiving part for receiving said broadcast; language model specifying part for specifying said language model retained in advance, by using information specifying said received language model; correcting part for utilizing a synonym dictionary in which a plurality of words are classified into word classes on the basis of the synonymy between the words, and of thereby correcting a frequency of appearance of a predetermined combination of said word classes in an expression form of said specified language model and/or a frequency of appearance of a predetermined word with reference to said word class in an expression form of said specified language model, on the basis of history information of speech recognition result of already performed speech recognition; speech recognition part for performing speech recognition of a voice uttered by a viewing person, by using said corrected language

model; specifying part for specifying said keyword information on the basis of the speech recognition result; and displaying part for displaying additional information corresponding to said specified keyword information.

21. (New) A second apparatus comprising:

receiving part for receiving a broadcast broadcasted from a first apparatus having broadcasting part for broadcasting additional information that is made to correspond to an object appearing in broadcast contents broadcasted from a broadcasting station and that contains keyword information specifying said object, simultaneously with said broadcast contents;

recognition vocabulary set generating part for utilizing a synonym dictionary in which a plurality of words are classified into word classes on the basis of the synonymy between the words, and of thereby generating, in a manner corresponding to said additional information, a recognition vocabulary set consisting of words belonging to said word class including a word corresponding to said received keyword information;

speech recognition part for performing speech recognition of a voice uttered by a viewing person;

specifying part for specifying said keyword information corresponding to said recognition vocabulary set when a word recognized as the speech recognition result is contained in the recognition vocabulary set; and

displaying part for displaying additional information corresponding to said specified keyword information.

22. (New) A second apparatus according to claim 21, wherein an appearance frequency determined in advance is imparted to each word of said synonym dictionary; and

wherein when a plurality of words have been recognized as candidates of said speech recognition, said speech recognition part specifies a word having the highest appearance frequency, as a word recognized as said speech recognition result.

23. (New) A second apparatus according to claim 22, further comprising:

appearance frequency correcting part for rewriting said appearance frequency depending on a recognition result of said speech recognition result.

24. (New) A second apparatus according to claim 22, further comprising:

appearance frequency correcting part for rewriting said appearance frequency corresponding to each word of said recognition vocabulary set depending on history information of said speech recognition result;

wherein said appearance frequency corresponding to each word is imparted to each word of said recognition vocabulary set; and

wherein said speech recognition part performs said speech recognition using said appearance frequencies of said recognition vocabulary set.

25. (New) An second apparatus comprising:

receiving part for receiving a broadcast broadcasted from a first apparatus having broadcasting part for broadcasting additional information that is made to correspond to an object appearing in broadcast contents broadcasted from a broadcasting station and that contains keyword information specifying said object, and a language model, simultaneously with said broadcast contents;

correcting part for utilizing a synonym dictionary in which a plurality of words are classified into word classes on the basis of the synonymy between the words, and of thereby correcting a frequency of appearance of a predetermined combination of said word classes in an expression form of said language model and/or a frequency of appearance of a predetermined word with reference to said word class in an expression form of said language model, on the basis of history information of speech recognition result of already performed speech recognition;

speech recognition part for performing speech recognition of a voice uttered by a viewing person, by using said corrected language model;

specifying part for specifying said keyword information on the basis of the speech recognition result; and

displaying part for displaying additional information corresponding to said specified keyword information.

26. (New) A second apparatus comprising:

receiving part for receiving a broadcast broadcasted from a first apparatus having broadcasting part for broadcasting additional information that is made to correspond to an object appearing in broadcast contents broadcasted from a broadcasting station and that contains keyword information specifying said object, and information specifying a language model, simultaneously with said broadcast contents;

language model specifying part for specifying said language model retained in advance, by using information specifying said received language model;

correcting part for utilizing a synonym dictionary in which a plurality of words are classified into word classes on the basis of the synonymy between the words, and of thereby correcting a frequency of appearance of a predetermined combination of said word classes in an expression form of said specified language model and/or a frequency of appearance of a predetermined word with reference to said word class in an expression form of said specified language model, on the basis of history information of speech recognition result of already performed speech recognition;

speech recognition part for performing speech recognition of a voice uttered by a viewing person, by using said corrected language model;

specifying part for specifying said keyword information on the basis of the speech recognition result; and

displaying part for displaying additional information corresponding to said specified keyword information.

27. (New) The second apparatus of claim 26 wherein the information specifying said language model is an ID imparted to said language model in advance.

28. (New) The second apparatus of claim 26 wherein:

the information specifying said language model is keyword information for language model specification;

the keyword information for language model specification is imparted also to said language model retained in advance; and

said language model specifying part specifies said language model depending on the degree of agreement of those keywords for language model specification.

29. (New) A second apparatus according to any one of claims 25 to 28 wherein:

if said correcting part corrects a frequency of appearance of a predetermined word with reference to a predetermined word class in an expression form of said language model, wherein said history information contains a word recognized in said already performed speech recognition and said correcting part extracts a word contained in said word class containing the word corresponding to said keyword information;

with respect to a word contained in said history information among the extracted words, a frequency of appearance of the word with reference to said word class in an expression form of said language model is increased; and

with respect to a word not contained in said history information among the extracted words, a frequency of appearance of the word with reference to said word class in an expression form of said language model is decreased.

30. (New) A second apparatus according to any one of claims 25 to 28 wherein:

if said correcting part corrects a frequency of appearance of a predetermined combination of said word classes in an expression form of said language model, wherein said history information contains a word recognized in said already

performed speech recognition and said correcting means extracts a word class containing a word corresponding to said keyword information;

with respect to said extracted word class, a frequency of appearance of a predetermined combination of said word classes in an expression form of said language model is increased; and

with respect to a word class not extracted, a frequency that the word class appears after a predetermined sequence of said word classes in an expression form of said language model is decreased.

31. (New) A second apparatus according to any one of claims 25-28 wherein:

if said correcting means corrects a frequency of appearance of a predetermined combination of said word classes in an expression form of said language model, wherein said history information contains a word class containing a word recognized in said already performed speech recognition and said correcting part extracts a word class corresponding to said keyword information;

with respect to said extracted word class, a frequency of appearance of a predetermined combination of said word classes in an expression form of said language model is increased; and

with respect to a word class not extracted, a frequency of appearance of a predetermined combination of said word classes in an expression form of said language model is reduced.

32. (New) A second apparatus according to any one of claims 21-28, comprising transmitting part for transmitting an instruction corresponding to a predetermined operation to a predetermined transmission destination when the predetermined operation is performed on said displayed additional information.

33. (New) The second apparatus according to claim 32, wherein said additional information is goods sales information and/or services sales information, and wherein said instruction corresponding to a predetermined operation is a request for brochure or purchase instruction information concerning said goods and/or said service.

34. (New) The apparatus of claim 26 wherein said language model retained in advance has been acquired in advance through a network.

35. (New) A computer-processible recording medium including a program that causes a computer to serve, in a second apparatus according to claim 21, as:

receiving part for receiving a broadcast broadcasted from a first apparatus having broadcasting part for broadcasting additional information that is made to correspond to an object appearing in broadcast contents broadcasted from a broadcasting station and that contains keyword information specifying said object, simultaneously with said broadcast contents;

recognition vocabulary set generating part for utilizing a synonym dictionary in which a plurality of words are classified into word classes on the basis of the synonymy between the words, and of thereby generating, in a manner corresponding to said additional information, a recognition vocabulary set consisting of words belonging to said word class including a word corresponding to said received keyword information;

speech recognition part for performing speech recognition of a voice uttered by a viewing person;

specifying part for specifying said keyword information corresponding to said recognition vocabulary set when a word recognized as the speech recognition result is contained in the recognition vocabulary set; and

displaying part for displaying additional information corresponding to said specified keyword information.

36. (New) A computer-processible recording medium including a program that causes a computer to serve, in a second apparatus according to claim 25, as:

receiving part for receiving a broadcast broadcasted from a first apparatus having broadcasting part for broadcasting additional information that is made to correspond to an object appearing in broadcast contents broadcasted from a

broadcasting station and that contains keyword information specifying said object, and a language model, simultaneously with said broadcast contents;

correcting part for utilizing a synonym dictionary in which a plurality of words are classified into word classes on the basis of the synonymy between the words, and of thereby correcting a frequency of appearance of a predetermined combination of said word classes in an expression form of said language model and/or a frequency of appearance of a predetermined word with reference to said word class in an expression form of said language model, on the basis of history information speech recognition result of already performed speech recognition;

speech recognition part for performing speech recognition of a voice uttered by a viewing person, by using said corrected language model;

specifying part for specifying said keyword information on the basis of the speech recognition result; and

displaying part for displaying additional information corresponding to said specified keyword information.

37. (New) A computer-processible recording medium including a program that causes a computer to serve, in a second apparatus according to claim 26, as:

receiving part for receiving a broadcast broadcasted from a first apparatus having broadcasting part for broadcasting additional information that is made to correspond to an object appearing in broadcast contents broadcasted from a broadcasting station and that contains keyword information specifying said object, and information specifying a language model, simultaneously with said broadcast contents;

language model specifying part for specifying said language model retained in advance, by using information specifying said received language model;

correcting part for utilizing a synonym dictionary in which a plurality of words are classified into word classes on the basis of the synonymy between the words, and of thereby correcting a frequency of appearance of a predetermined combination of

said word classes in an expression form of said specified language model and/or a frequency of appearance of a predetermined word with reference to said word class in an expression form of said specified language model, on the basis of history information of speech recognition result of already performed speech recognition;

speech recognition part for performing speech recognition of a voice uttered by a viewing person, by using said corrected language model;

specifying part for specifying said keyword information on the basis of the speech recognition result; and

displaying part for displaying additional information corresponding to said specified keyword information.